SOCIAL WEB AND DIGITAL LITERACY

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The interactive and online applications on the Internet transformed child's everyday environment wholesale: now it is common that school-age children stay hours in front of the computer using not only games but also social applications. Many of them are engaged in continuous presence on one or other social site. Schools keep hardly abreast of this change because informal learning by means of Internet fits not easily to institutional education; consequently, it's necessary to modify education's methodology. The transformation of reading, the shared nature of knowledge and critical, the digital environment actively forming approach has outstanding role in this learning process. The first task for the schools on this field is to teach: how to do things with these applications? In case of social web the Internet is such an instrument, which is produced, formed and shared by the users. By the idea of participatory learning, digital literacy is built on the ground of accelerated activity of pupils. My first attempt to familiarize students with active and participated forming of online sources was with Wikipedia-entries – this online encyclopaedia is the first and insecure, by teachers frequently condemned knowledge source for pupils and students –, on the topic of philosophical approaches to literacy. The results show three main areas: (1) collecting and selecting, (2) critical thinking, (3) knowledge ordering for sharing; all the three will be shortly discussed in the lecture.

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The well-known sentence, "The medium is the message", indicates a deep understanding of the logic of modern media: a medium's content matters less than the medium itself in influencing how people think and act. Of course, McLuhan (1964) wrote some famous sentences on the electric media and not on the digital media; but his words proved much more valid in the digital age. Significant part of the information received by the students originates from the Internet, mostly from the social web. School-age children stay hours on end using social applications: they are almost all the time online. Teachers certainly know the sometime very disturbing phenomenon that the pupils use their smart phones during the lessons (it occurs that some events of the lessons appear in real time on the Facebook or other social site). McLuhan (1964) saw the social change in the nature of consciousness too. According to him, the collective consciousness comes into existence with its liberation from the isolation caused by writing, silent reading and press. This change is fulfilled in our age.

One can understand this transformation and its relation to the education if one looks over the factors that influence the thinking and intellectual development of pupils. It occurs in a complex environment: the institutional

education happens in schools, the informal learning happens in social interactions. It's easy to see that the Internet and the social web mean the more and more important part of the latter. On account of this, the student's environment transformed to a virtual environment: they communicate, play and informally learn in a digital, virtual space. And when we are talking about digital age, it's plausible that education and learning itself are the most dramatic medium of that age, because the main task of schools is the preparation to orientation in a digital world. It is not just a technological change, and what is more, technology is not the factor what constitutes the revolutionary nature of that change – it is rather the new way of learning, the shared and interactive character of collecting information.

McLuhan (1964) might not know how serious is the problem he wrote about. Some new researches have shown that when the way one collect information changes, the synaptic structure of corresponding brain areas changes too. Here references can be mentioned like the famous research on brain structure of London cab drivers or many researches on neuroplasticity, e. g. phantom limb (c. f. Carr, 2010). No question, the nervous system can adapt to environmental pressures, physiologic changes, and new experiences.

The main question is, whether the school can follow the transformation of student's environment or just continue the conventional education that is shaped to the analogue, traditional environment. The problem is well illustrated with the distinction of *digital natives* and *digital immigrants* that is nowadays frequently in use (cf. Kolikant 2010, Margaryan, Littlejohn & Vojt, 2011). Generally, in schools digital natives are taught by digital immigrants (according to Prensky, 2001, the confine is 1980, who was born before that, is an immigrant, after that is a native). Natives and immigrants have different way of thinking, one follows a shared, in the large parallel logic, the other a concentrated, in the large linear logic. Schools formulate their expectations usually on the ground of immigrant's mentality and don't take native's different mentality into account. Differences in the technical knowledge and skills just aggravate this problem. Consequences of this course are serious: first of all, institutional and informal learning diverge, and schools constitute an isolated space, which is separated from the student's prime digital environment. Modes of learning have significantly changed, but the schools have just slightly changed. It has changed dramatically how we exchange information, how we look for information, how we interact – but it has just slightly changed how we teach. Until we cannot manage these changes, institutional learning will lose its efficiency.

It's easy to see that through this course the privileged position of schools ceases. In a classical model schools control the flow of information; but in the digital age information flows uncontrolled and the best, schools can do, is to join that flow. Therefore schools are not physically separated places of "knowledge" or learning but a part of a virtual informational space. The same happens to the hierarchical array of classical model: there are now horizontal forms in place of subordinated and superimposed relations.

That's why digital literacy has an outstanding role in the education's tasks. Schools have to follow the changes in the student's environment and they must be integrated in this environment too. Digital literacy is not just a "new" literacy – in traditional meaning of literacy – but an important piece in the system of e-competences, together with informational literacy, technological literacy, media literacy and e-awareness (cf. Cobo & Juan, 2009; Fernandez-Villavicencio, 2010). This system represents the essential skills for the main aspects of digital environment.

Digital literacy doesn't mean just literacy in all kinds of media that have transformed to an all-purpose digital medium but participating in the new,

digitally based communication. Everybody knows how social web and social sites have extended of recent years. It's not surprising that children and youngsters use willingly social sites: 15 % of their users are under 17 (notwithstanding that for example, that Facebook limits its users under 13 – http://royal.pingdom.com/2010/02/16/study-ages-of-social-network-users/ [06.02.2011]). Social sites make easy to participate in a continuous flowing communication and to stay in contact with many people who are not in the same space. If a teacher observes her (or his) student's communication, she (or he) can notice that they often share not just their thoughts and feelings, momentary emotional states but their questions and advices correlating with school and learning. And that was just a single example for the use of devices of Web 2; student's extended usage of Wikipedia, online multiuser or social games, photo- and video-sharing applications (and so on) are remarkable too.

Therefore schools have a new task: they have to teach how to do things with these applications, or generally, how to navigate in a digital and virtual space. Schools must participate in virtual space (there are opinions that schools are virtual institutions already, and mustn't forget that behind every virtual institutions there are real institutions and persons).

Significant part of teachers has serious critical arguments against adaptation of social applications in education, and the criticism isn't fictitious. Unfortunately, information on the web can be uncontrolled, false or superficial, and students can't aptly select it. But there are benefits in these applications too: children like to use social sites, and they are familiar with the environment on these sites. Usage of technical devices and programs can be inspiring and facilitating creativity to a great extent. Students are more active while using Web 2 devices than sitting on classical lessons, and their attention keeps longer up. But the most important is that students participate actively in all processes of education and stay connected with their teachers and fellows. This way of education is named "participatory learning" by Davidson and Goldberg (2009).

Through processes of participatory learning the play between technology, composer and audience is no longer passive – indeed, participatory educational processes blur these traditional lines. There is a very important parallelism in the keynote of social web and participatory learning: both see sharing as a central paradigm.

In case of education sharing means not just classical, "top-down" sharing of knowledge or ideas but horizontal connections too. Like on social sites, people can share thoughts with friends, fellows or unknown persons, and they can learn in the same way. As my experiences showed me, there is one more thing one can stress: productivity.

Applying the scheme of participatory learning, teams of students can collect and share information, but the main goal is to create a collective product, namely knowledge. Productivity means that this knowledge is more than the previous information, it can be a starting point of further learning processes, and later is accessible for everyone.

Over the last two semesters I tested a method to familiarize students with active and participated forming of online sources like Wikipedia. Wikipedia is by teachers frequently condemned knowledge source for pupils and students, and it's often really insecure and uncontrolled (there is a team of editors who continuously control the entries but the strictly scientific contents are not warranted). In my opinion users have the responsibility to make Wikipedia a secure and reliable source; therefore I gave my students the task to write entries. Students worked in small teams (3-4 persons) and the team had to choose a concept that was missing on Hungarian Wikipedia

site. Simple translation from another language was not permitted. On the task instructions were given to groups but they had to find and collect the necessary information on their own. After the entries were ready, control and evaluation were done together.

The main edifications are as follows. First of all, collecting and evaluating information helped to develop critical view. Students had to use not just digital sources but "old" ones too, like books, periodicals and library. They learned various strategies for search and to apply them mixed. One needs different strategy for search on the Internet and for library, but a specific search may start on the web and close in a library. Critical thinking is indispensable for selecting in an extended set of information. In general, students find books and periodicals more reliable than sources on the Internet, and used them to a larger extent.

Some students used social sites too. They asked friends on a topic or looked for a group with related interest, some found persons who are educated and experienced on that topic. Social sites had an important role in finding pictures or diagrams for an entry, especially in finding open source ones.

Sharing knowledge was another benefit of the lesson. In the digital age knowledge is no more a personal property but a social and shared value: it is produced and utilized collectively. The idea of participatory learning helps to see the effectiveness of student's activity in knowledge production, and may help to shape the sources of knowledge on the Internet. The importance of digital literacy is outstanding if one considers that the primary device for orientation is the web: digital immigrants use it often too like natives, e. g. when they want to buy something or need information for travel.

Today it is not enough to condemn Internet because of its unreliability. Web 2 and social web mean that the users not just utilize the contents but they produce them too. Schools can teach their students how to utilize critically what they find there, and how to create reliable contents. That means, that digital literacy require an active participation in all processes of information production and consumption.

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